

## REMARKS

Claims 1-4 and 7-19 are pending in this application. All claims were rejected. Claims 1 and 7 have been amended. Reconsideration of the rejections of all pending claims is requested.

### I. Rejection of Claims 1-3, and 7-17 Under 35 U.S.C. §103(a)

Claims 1-3, and 7-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Davidson (U.S. 5,639,163) in view of Deng (U.S. 6,911,861).

#### CLAIM 1

Claim 1, as amended herein, is printed as follows for convenience:

An integrated circuit, comprising:  
a number of pads;  
a constant current source to provide a current;  
a thermal diode that receives said current, said thermal diode being coupled between first and second ones of said pads; and  
an analog to digital converter to i) receive a forward bias voltage of the thermal diode, and ii) output a digital representation of the forward bias voltage;  
**wherein a third one of said pads is provided to receive a reference current, said third pad being coupled to an input of said constant current source, said reference current serving to control the constant current source.**

Some portions of claim 1 that are not disclosed by either Davidson or Deng, or their combination, have been printed in bold type.

Neither Davidson nor Deng disclose, “wherein a third one of said pads is provided to receive a reference current, said third pad being coupled to an input of

said constant current source, said reference current serving to control the constant current source" as claimed in claim 1. The office action states that this element is described in the prior art of Deng and that it would be obvious to combine Deng with Davidson. The applicants argue that such a combination would not work and is therefore improper.

The prior art circuit disclosed in Deng is related to a current source, wherein the current is controlled by a voltage VBG. The prior art circuit of Deng outputs a reference current.

There is no description provided in the office action as to how the prior art circuit of Deng can be added to the circuit of Davison so that Davidson could receive the reference current and the reference current could serve to control the constant current source of Davidson. According to MPEP §706.02(j)(C), the Examiner should set forth the proposed modification of the applied references necessary to arrive at the claimed subject matter. The description in the office action does not provide any explanation as to how these references can be combined in order to render claim 1 obvious.

The office action simply states that Davidson could be modified to include the current source of Deng. There is no guidance on how Davidson could be modified and the applicants do not know how such a modification could be incorporated into Davidson wherein the reference current of Deng controls the constant current source of Davidson. Just because the art of Davidson and Deng may be related does not mean that the circuit of Deng can be incorporated into Davidson. Accordingly, the applicants contend that the combination of Deng and Davidson as proposed in the office action is not proper.

Based on the foregoing, the applicants contend that the rejection under 35 U.S.C. §103(a) is not proper and request reconsideration of the rejection. Should this rejection be maintained, the applicants request an explanation as to how Deng could be incorporated into Davidson and function as recited in claim 1. More specifically, the applicants would like a description as to how the reference current of Deng could control the constant current source of Davidson.

## CLAIMS 2 AND 3

Claims 2 and 3 are dependent on claim 1 and are deemed allowable by way of their dependence and for other reasons. Accordingly, the applicants request reconsideration of the rejections.

## CLAIM 7

Claim 7, as amended herein, is printed as follows for convenience:

An integrated circuit, comprising:

- a constant current source to provide first and second currents of different magnitudes;
- first and second thermal diodes that respectively receive said first and second currents;
- a comparator to receive forward bias voltages of each of the thermal diodes, to compare the forward bias voltages, and to output a voltage difference indicative of a temperature of the integrated circuit; and
- a pad to receive a reference current, said pad being coupled to an input of said constant current source, said reference current serving to control the constant current source.**

Some portions of claim 7 that are not disclosed by either Davidson or Deng, or their combination, have been printed in bold type.

Claim 7 was rejected based on the same grounds as the rejection of claim 1. Accordingly, the applicants incorporate the rebuttal to the rejection of claim 1 into this rebuttal of the rejection of claim 7. More specifically and as stated above, Deng cannot be incorporated into Davidson so that a reference current generated by Deng is able to control the constant current source of Davidson.

Based on the foregoing, the rejection of claim 7 has been overcome and the applicants respectfully request reconsideration of the rejection. As with claim 1, if

this rejection is maintained, the applicants request a description as to how Deng can be combined with Davidson so as to render claim 7 obvious.

## **CLAIMS 8-17**

Claims 8-17 are dependent on claim 7 and are deemed allowable by way of their dependence and for other reasons. Accordingly, the applicants request reconsideration of the rejections.

### **II. Rejection of Claims 4 and 19 Under 35 U.S.C. §103(a)**

Claims 4 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Davidson (U.S. 5,639,163) and Deng (U.S. 6,911,861) in view of Vergis (U.S. 6,453,218).

Claims 4 and 19 are dependent on claims 1 and 7, respectively, and are deemed allowable by way of their dependence and for other reasons. Accordingly, the applicants request reconsideration of the rejections.

### **III. Rejection of Claim 18 Under 35 U.S.C. §103(a)**

Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Davidson (U.S. 5,639,163) and Deng (U.S. 6,911,861) in view of Audy (U.S. 5,195,827).

Claim 18 is dependent on claim 7 and is deemed allowable by way of its dependence and for other reasons. Accordingly, the applicants request reconsideration of the rejection.

In view of the above, all of the pending claims are now believed to be in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,  
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